

## Notes on the African Finfoot, *Podica senegalensis* (Vieillot) with particular reference to Uganda

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The finfoots—an aberrant family (Heliornithidae) of remarkable, aquatic birds—are found in Central and South America, Africa and South-east Asia, including the East Indies. In Africa there is one resident species which, according to Chapin (18), can be separated, mainly on size, into five races, one of which, the smallest, *Podica senegalensis senegalensis* occurs in Uganda. There appears to be considerable overlap in size and coloration of these races, as well as some confusion between the similarly coloured though differently sized adult females and juvenile males, the latter being the larger, so one is tempted to wonder how much justification there is for so much separation, based to a great extent, on a clinal size difference.

*Podica senegalensis* is widely distributed from Senegal, in the west, to north-eastern Congo, northern Uganda and north-eastern Kenya in the east, and southerly throughout the continent to South Africa. For a long time considered a rarity, it is now known that it is by no means uncommon where local conditions are suitable, but it is so secretive and elusive that it is more likely to escape detection than come to notice. This is well illustrated by Sir Frederick Jackson's experience at Entebbe, Uganda, where for some years he was not aware of the finfoot's occurrence, although he was constantly bird-watching in its haunts.

In certain respects there is a resemblance between the finfoots and the coots, rails, grebes, ducks, cormorants and darters, but they are nearest the Rallidae. The finfoot has similarly curiously lobed or fringed feet as the coot; like the coot, too, the toes terminate in a sharp claw. The voice of the finfoot is similar to the guttural cry ending in a squawk or squeak of certain rails, and when running on land the gait can be rail-like (22: p. 137). It might be mistaken for a grebe in the water, but the rhythmic forward movement of its head and neck in unison with its paddling should identify it. It also has a general cormorant-like appearance, and at times especially when alarmed it will, darter-fashion, submerge its body leaving only the long neck and head above the water. Its somewhat slender build is well adapted to aquatic life, and as in most diving birds the plumage is close.

In all the African races the females are considerably smaller than the males.

*Podica senegalensis senegalensis* (Vieillot), West African or Senegal Finfoot. According to Praed and Grant (8: p. 305) the Uganda finfoot is *Podica senegalensis petersi* Hartlaub, but Chapin in a further revision (1954) of the African finfoots shows that the Protectorate's representatives belong to the nominate race. At the same time he describes from Kenya Colony, east of the Rift Valley, a new and larger race which he designates *Podica senegalensis somereni*. Apart from the factor of size, there are some slight plumage differences between most of these races. The finfoot is probably widely distributed throughout Uganda, up to perhaps the 6,000 feet level, along rivers, lakes and other waters where there is suitable cover. Jackson (7: pp. 311–312) observed it at Entebbe: and between 1925

and 1950, I saw one on the River Udek in Lango (22: p. 137); another in the shelter of cover by the Ankole bank of the Kazinga Channel, north-east of the causeway (1: p. 24, para. 172); and the bill and feet of a third were sent to me from the Budongo forest, in Bunyoro. More recently, in 1961, the finfoot has been recorded on the River Kibaa, a tributary of the River Nile, in the Murchison Falls National Park, and another, under the cover of an overhanging bush, on one of the wallows on the Toro (West) side inland from the Kazinga Channel, in the Queen Elizabeth National Park. Also, Mr. Martin Woodcock, who visited Uganda in January 1962, observed one of a pair which frequent the River Kagera (Uganda/Tanganyika boundary) several miles downstream of Merama Hill. All these localities indicate its widespread distribution throughout Uganda. I have also twice seen individuals of the larger race *P. s. petersi* on the River Kafue, in Northern Rhodesia.

The finfoot is a skulker and is not easily observed, for it is associated with the denser wooded littoral of the waters it frequents and it is most active in the early morning and evening.

I can find nothing in the literature concerning migration—which is unlikely—or local movements, which in some localities are a result of low water conditions.

It must be uncommon on Lake Victoria, for I never once came across it during a period of more than twenty years when I was constantly investigating the forested shores, both by water and land. It is not gregarious and is usually seen solitary, a female with one or two juveniles, and occasionally a pair.

Much valuable knowledge about the habits of this elusive bird has been derived from many carefully recorded observations. Whenever I have seen a finfoot undisturbed, it has been swimming with the body fairly low in the water; but as soon as it became alarmed it semi-submerged or even fully submerged, with only the long neck and head exposed, darter-fashion. When swimming in deep water the body is mainly submerged. Although an expert diver, I have never seen it dive, which it may resort to more when feeding. Priest (16: p. 71) records that an adult female and a large juvenile when alarmed instantly dived and swam under water.

The Udek example (22: p. 137) when first observed was swimming in a series of river pools and reminded me of a slightly-built duck. It swam rapidly, which it preferred to running rail-like through and under the overhanging cover at the water's edge, until unduly disturbed.

As a general rule, unless feeding, the finfoot keeps in the shelter of cover where its dark plumage is added protection.

Dr. Serle (3: p. 163) gives an excellent description of finfoot behaviour as observed early in the morning on a crater lake in British Cameroon "They skulk at the lake edge in the shadows of the overhanging foliage, and are shy. On the approach of danger they swim away, the body submerged except for the head and neck, deeper into the shadows, or clamber ashore and disappear in the forest undergrowth; or they may rise, and scurrying over the lake, with wings and feet beating the surface describe a wide arc before coming to shore again; or rarely, they rise cleanly and after a shorter or longer flight, drop as cleanly into the lake again". These observations seem to cover most aspects of its flight and alarm behaviour, except that of diving, but Serle further records that on another

occasion "one bird was fishing out in the open lake a hundred yards or more from the shore. As it swam its head and neck inclined forward rhythmically with each stroke of its feet. It lay low in the water with the tail just visible parallel to the surface. The red bill was pointed slightly upwards. It dived effortlessly, in a moment vanishing from sight without any splash".

When disturbed the finfoot patters along the surface with beating wings, dangling feet and dragging tail, to take refuge in the shelter of the nearest cover. But when frightened it seems reluctant to dive. It roosts in overhanging bushes a few feet above water level (16: p. 71), but in order to get up into a bush to roost or to its nest it has to be able to make use of a suitable branch leading out of the water (21: p. 35, No. 150). Jackson (7: p. 311) watched one make several futile attempts to climb on to ambatch branches, until it eventually found one suitable "on which it waddled like a Penguin". Then it sat half upright and preened itself. It commonly sits on boughs or tree trunks overhanging the water. Priest (16: p. 67) records that at a nest found by H. Burrows, the female was sitting on the nest asleep, with her head reclining on her back, while the male was perched on a branch close to the nest. Its extraordinarily stiff, long tail feathers aid it in climbing. It can run surprisingly fast, as well as traverse reeds, swamp vegetation and dense cover with rapidity. A wounded bird has been seen to climb up a bank out of the water and then, rather like a duck, nimbly ascend a small tree to ten or twelve feet above water level (4: p. 39). An undisturbed male watched by Priest (16: p. 72) walked like a duck. 'Water-Treader', one of its popular names in South Africa, is easy to explain; but I do not know the origin of 'Sun-Grebe'.

As it is always so much on the alert it is most difficult to shoot. Should anyone be fortunate to obtain a close-up view, its strange appearance—especially on land—should identify the finfoot. It is generally dark brown above, glossed greenish-black on the head, back of neck and mantle, and spangled with conspicuous, rather round, whitish spots: below, white, slightly barred brownish and buff on the flanks: under tail coverts mottled brownish. Behind the eye and down each side of the neck there is a broad white stripe. The male has a grey throat; in the female it is whitish. The blackish tail of 18 narrow tapering feathers is fan-like. The rectrices have very stiff pale shafts, and white tips when freshly moulted; but the tips soon become worn and frayed from constantly dragging along the water surface when in flight. The wings are surprisingly long and pointed. There is a blunt spur or spike, which in the juveniles is fine, curved and needle sharp, on the carpal joint. The long, almost straight bill, with a large nasal slit nearly one quarter the length of the culmen, is coral red, rich orange-red or scarlet; in the female it is whitish below; the tip and culmen are blackish or dusky. The feet are coral red, and the middle toe is pectinated along the inner edge. The iris of the male is brown or reddish-brown: that of the female is usually paler. The juvenile males are similar to the adult female, but larger and much browner above with a very few buff spots: the underparts are pale buff marked with rust brown, particularly on the breast. An adult male *petersi* shot by Priest (16: p. 70) weighed 1 lb. 15 ozs.

The Cameroon race *P. s. camerunensis* has a tendency to melanism. The downy chick of typical *senegalensis* is generally dark brown above, with

rufous fore-crown: below, white except for a band of light brown or cinnamon across the breast. On hatching the chick takes to the water and the lobes on its tiny feet are already well-developed.

The finfoot's food consists mainly of water insects—it has been seen to catch a butterfly—small water molluscs, crabs, shrimps, prawns, frogs and sometimes small fish; but fish are evidently a rare item in its diet. There is usually a little grit in the stomach.

Jackson (7: p. 312) watched one feeding amongst the water-grasses at Entebbe picking insects off the stems.

No-one has recorded how the finfoot feeds, whether it remains mainly on the surface using its long neck and bill, or does it dive a lot. One wonders what is the daily insect and other aquatic life consumption of the finfoot in contrast to the voracity of cormorants and darters. I have not found any reference to the colour of the yolk of the finfoot's egg; this could be an indication of the principal food constituents.

Neither Jackson nor I ever heard any cry, but apart from a certain amount of inconclusive conjecture there are some definite records. According to Bates (20: p. 75) "A bird caught and brought to me alive uttered a low growl that was accompanied by a trembling of the whole body, and passed into a weak squawk with open mouth". Rather similarly, Priest (16: p. 68) quoting Sclater "caught two of these birds in traps set for otters; when taken from the traps they made an extraordinary noise like the growling of a wild beast, and were very savage".

Benson (19: p. 263) records that an African's description of the finfoot's cry sounded like 'm-m-m, p-r-r-r' (respectively deep and explosive) repeated many times and strikingly loud. This cry is to be heard between December and April (in Northern Rhodesia), which coincides with the latter part of the breeding season. It tallies with Roberts' (2: p. 112) "a low reiterated booming sound".

The nest is a shallow saucer or almost flat platform about twelve inches in diameter, of twigs and reed stems, lined with a little coarse grass, leaves or reeds—one which I found in October in a bush overhanging the River Kafue, in Northern Rhodesia, was lined with a soft, green, moss-like material. The nests are in bushes or on tree branches overhanging water and several feet above the water level. They are almost invariably placed on top of flood refuse, indicating that breeding, which may take place before, during and occasionally after the rains, must avoid the height of the flood season.

From the little data available—mainly of the race *petersi* in Southern Rhodesia—it would appear that C/2 is the normal set, though I have (*in litt.*) been given by H. M. Miles one Southern Rhodesia record of C/3, but without measurements. Belcher (14: p. 71) records C/2 taken in South Africa "nearly even-ended, large for the bird, and brown with darker markings".

No eggs seem to have been found in West Africa or East Africa, though Chapin (5: p. 37) describes from the north-eastern Congo an oviduct egg of the moninate race; he also suggests that, as indicated by this ovary, this must be the last egg of a set of three.

The eggs are rather bustard-like but glossy; the ground colour varies from brown, drab, creamy or buff to pale buffy-green; blotched, spotted and streaked—sometimes with heavy concentrations on top of large end—

with dark umber, red-brown and purplish-brown. The oviduct egg (5: p. 37) measured 50 x 38 mm., and was whitish, faintly tinged buff, with rufous spots all over varying from pin-points upwards, thickest and largest at the larger end. The average measurements of eleven eggs is 54.74 x 40.6 mm., with a range 52.0–58.0 mm. x 38.0–42.1 mm.

In the Lake Victoria region I would expect the main breeding season to coincide with the long rains, perhaps from March to June. But in northern Uganda where the rivers, excepting the Nile, are almost non-existent at the end of the dry season, breeding is unlikely before May or June. In the Ituri region of the neighbouring north-eastern Congo, Chapin (5: p. 37) collected a male in breeding condition at the end of April; shot the female with an oviduct egg on 22nd May, and examined another female in breeding condition on 22nd July. Further, he records "That the breeding season coincides with rains and high water in the rivers is confirmed by our three young specimens secured in September and December."

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## On *Aegithina tiphia* (Linn.), the Common Iora, from Ujung Kulon, western Java

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When ten males belonging to the subspecies *scapularis* are compared with a similar series of *micromelaena*\* and some specimens of *viridis* and *aequanimis* it is not easy to separate birds belonging to *scapularis* and *viridis* on differences in the colour of the under parts, but *micromelaena*

\* Mrs Hall<sup>8</sup> places *micromelaena* in the synonymy of *horizoptera*.